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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,093	12/06/2001	Michael Aguilar	135932 (ALCA01-35932)	3199

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06/09/2004

EXAMINER

ZEWDU, MELESS NMN

ART UNIT PAPER NUMBER

2683

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,093

Applicant(s)

AGUILAR ET AL.

Examiner

Meless N Zewdu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 15-20 is/are rejected.
- 7) ☐ Claim(s) 6 and 10-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-20 are pending in this action.

Claim Objections

Claims 2 and 19 are objected to because of the following informalities: the claims recite "legacy network ---- and --- new network". Legacy and new are relative terms. For example, today's new can become tomorrow's legacy. In other words the claims encompass a universal feature of bridging/connecting an old and a new network, always and including all generations, --- which has no support in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of McConnell(US 6,560,327 B1).

As per claim 1: the admitted prior art discloses a radio communication system having a mobile station operable to communicate by way of a first network pursuant to a first network communication service subscription, the first network operable pursuant to a first communication standard protocol and the first network coupled to a second network, the second network operable pursuant to a second communication standard

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protocol (see preamble). But, the APA does not explicitly teach about an apparatus for facilitating invocation of a second network service, resident at a second network service control point, by the mobile station wherein the apparatus comprises a bridge mechanism coupled to receive a first network generated request for invocation of the second network service by the mobile station, said bridge mechanism at least for selectably initiating authorization of the mobile station to involve the second network service. However, in a related field of endeavor, McConnell teaches that a service unavailable in a first communication network can be requested and acquired from a second communication network (see abstract; col. 6, line 22-col. 7, line 42, particularly col. 6, lines 52-55), wherein the service is facilitated by modules that reside in a service control point (SCP) (see figs. 7 and 8; col. 5, lines 29-45; col. 12, lines 45-54; col. 13, line 52-col. 14, line 5). It is to be noted that the mobile station in the first network would not have been able to receive service in the second network if the two networks did not have bridging mechanism. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the APA for the advantage of providing service available in a second to subscriber in a first network (see col. 7, lines 32-47).

As per claim 2: the apparatus wherein the first network comprises a legacy network, wherein the second network comprises a new network and the second network service comprises a new network service, the new network service unavailable at the legacy network, and wherein the request to which said bridge mechanism is coupled to receive comprises a first communication standard protocol message reads on '327 (see

abstract; col. 7, lines 38-42). It is obvious that the first and second networks of the prior art employ different protocols as in the case of a legacy and a new network.

As per claim 15: the admitted prior art discloses a radio communication system having a mobile station operable to communicate by way of a first network pursuant to a first network communication service subscription, the first network operable pursuant to a first communication standard protocol and the first network coupled to a second network, the second network operable pursuant to a second communication standard protocol (see claim 15, lines 1-5). But, the APA does not explicitly teach about a method for facilitating invocation of a second network service, resident at a second network service control point, by the mobile station, the method comprising, about generating a first communication standard protocol message at the first network to request invocation of the second network service by the mobile station; and generating a second communication standard protocol message responsive to the first communication station standard protocol message generated during said operation of generating the first communication standard protocol message generated at the second network and responsive of the request for the invocation of the second network service by the mobile station, as claimed by applicant. However, in a related field of endeavor, McConnell teaches that a service unavailable in a first communication network can be requested and acquired from a second communication network, wherein the first and second networks are of different standard protocols and the exchange of data control messages between the two networks takes place via the conversion of the individual network standard protocols (see abstract; col. 6, line 22-col. 7, line 42, particularly col. 6, lines

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52-55; col. 17, lines 13-67), wherein the service is facilitated by modules that reside in a service control point (SCP) (see figs. 7 and 8; col. 5, lines 29-45; col. 12, line 12-col. 13, line 11; col. 13, line 52-col. 14, line 5). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the APA for the advantage of providing service available in a second to subscriber in a first network (see col. 7, lines 32-47).

As per claim 16: the method comprising:

routing the second communication standard protocol message to the second network service control point reads on '327 (see abstract; col. 12, lines 12-54).

selectably granting the request for the invocation of the second network service subject to delivery of the second communication standard protocol message to the second network service control point reads on '327 (see col. 12, lines 12-54).

As per claim 17: the method comprising the further operation of:

Generating a grant message at the second network service control point, the grant message formatted to the second communication standard protocol reads on '327 (see col. 12, line 55-col. 13, line 11).

As per claim 18: the method comprising the further operation of:

converting the grant message into a second communication standard protocol formatted message reads on '327 (see abstract; col. 6, lines 21-67). It is obvious that the grant message generated at the second network would have to be converted into the first network protocol.

As per claim 19: the method:

wherein the first network comprises a legacy network and the second network comprises a new network, wherein the second network service comprises a new network service unavailable at the legacy network, and wherein the first communication standard protocol message generated during said operation of generating the first communication standard protocol message requests invocation of the new network service by the mobile station operable pursuant to the legacy network reads on '327 (see abstract; col. 6, lines 21-67). The prior art's first and second networks could be considered as legacy and new networks.

As per claim 20: the method wherein the first communication standard message is provided to a bridge mechanism bridging the first network and the second network, and wherein the second communication standard protocol message is generated by the bridge mechanism reads on '327 (see col. 13-28).

Claims 3-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of McConnell as applied to claim 1 above, and further in view of Purcell et al. (Purcell) (US 6,094,578).

As per claim 3: but, the APA in view of McConnell do not explicitly teach about a bridge mechanism that comprises a first communication standard protocol message detector, said first communication standard protocol message detector for detecting the first communication standard protocol message that requests the invocation of the second network service, as claimed by applicant. However, in a related field of endeavor, Purcell provides a gateway apparatus that gives interoperability and interface, including protocol conversion, between disparate mobile networks (see col. 1,

lines 50-67; col. 5, lines 10-62). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references with the teaching of Purcell for the advantage of increasing interoperability of international networks (see col. 1, lines 45-47). Note: the McConnell reference has a gateway/gateways (LEC). So, the modification is not going to be adding another gateway. Rather, it would be modifying APA in view of McConnell with the gateway features of Purcell.

As per claim 4: the apparatus wherein said bridging mechanism further comprises a second communication standard, protocol request message generator for generating a second communication standard protocol request message for communication to the second network service control point to request invocation of the second network service by the mobile station reads on '327 (see abstract; col. 15, line 26-col. 16, line 60). When the references are modified as shown above, at least two networks, employing different protocols could be bridged with a gateway and a second SCP (service control points) (see fig. 7, element 410) in a second network can be requested for service by a mobile station in a first network.

As per claim 5: the apparatus wherein said bridge mechanism further comprises a second communication standard, protocol response message detector for detecting a second communication standard protocol response message generated by the second network service control point and returned to said bridge reads on '327 (see abstract).

As per claim 7: the apparatus wherein said bridge mechanism comprises a first functional part functionally operable pursuant to the first communication-standard

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protocol and a second functional part functionally operable to the second communication standard reads on '578 (see col. 1, lines 29-60).

As per claim 8: the apparatus wherein the radio communication station comprises a cellular communication, wherein the first network is constructed pursuant to a communication standard that defines a media gateway and wherein the first functional part comprises media gateway functionality reads on '327 (see abstract; col. 17, lines 12-49).

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of McConnell as applied to claims 1 and 7-8 above, and further in view of Naim et al. (Naim) (US 6,678,517 B2).

As per claim 9: but, the above references shown above do not explicitly teach about a second network constructed pursuant to a communication standard that defines a soft-switch and wherein the second functional part comprises softswitch functionality, as claimed by applicant. However, in a related field of endeavor, Naim teaches about a method and system for providing continuous voice and packet data services to a mobile station, wherein the method and system includes a wireless softswitch (see fig. 1; col. 2, line 61-col. 3, line 37). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to add Naim's wireless softswitch to the above references for the advantage of interfacing/connecting and handling calls directed to 2G, 2.5G, and 3G mobile phones.

Allowable Subject Matter

Claims 6 and 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


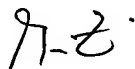
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N Zewdu whose telephone number is (703) 306-5418. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Meless Zewdu
Examiner



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

02 June 2004.